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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,355	07/12/2005	Vicki S Elliott	039386-2250	6312
22428 7590 01/24/2007 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			EXAMINER CARLSON, KAREN C	
			ART UNIT	PAPER NUMBER
			1656	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
31 DAYS		01/24/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/524,355

Applicant(s)

ELLIOTT ET AL.

Examiner

Karen Cochrane Carlson, Ph.D.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-139 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-139 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

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Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group 1, claim(s) 1, 2, 17, 18, and 56, drawn to polypeptide having SEQ ID NO: 1.
Group 2, claim(s) 1, 2, 17, 18, and 57, drawn to polypeptide having SEQ ID NO: 2.
Group 3, claim(s) 1, 2, 17, 18, and 58, drawn to polypeptide having SEQ ID NO: 3.
Group 4, claim(s) 1, 2, 17, 18, and 59, drawn to polypeptide having SEQ ID NO: 4.
Group 5, claim(s) 1, 2, 17, 18, and 60, drawn to polypeptide having SEQ ID NO: 5.
Group 6, claim(s) 1, 2, 17, 18, and 61, drawn to polypeptide having SEQ ID NO: 6.
Group 7, claim(s) 1, 2, 17, 18, and 62, drawn to polypeptide having SEQ ID NO: 7.
Group 8, claim(s) 1, 2, 17, 18, and 63, drawn to polypeptide having SEQ ID NO: 8.
Group 9, claim(s) 1, 2, 17, 18, and 64, drawn to polypeptide having SEQ ID NO: 9.
Group 10, claim(s) 1, 2, 17, 18, and 65, drawn to polypeptide having SEQ ID NO: 10.
Group 11, claim(s) 1, 2, 17, 18, and 66, drawn to polypeptide having SEQ ID NO: 11.
Group 12, claim(s) 1, 2, 17, 18, and 67, drawn to polypeptide having SEQ ID NO: 12.
Group 13, claim(s) 1, 2, 17, 18, and 68, drawn to polypeptide having SEQ ID NO: 13.
Group 14, claim(s) 1, 2, 17, 18, and 69, drawn to polypeptide having SEQ ID NO: 14.
Group 15, claim(s) 1, 2, 17, 18, and 70, drawn to polypeptide having SEQ ID NO: 15.
Group 16, claim(s) 1, 2, 17, 18, and 71, drawn to polypeptide having SEQ ID NO: 16.
Group 17, claim(s) 1, 2, 17, 18, and 72, drawn to polypeptide having SEQ ID NO: 17.
Group 18, claim(s) 1, 2, 17, 18, and 73, drawn to polypeptide having SEQ ID NO: 18.
Group 19, claim(s) 1, 2, 17, 18, and 74, drawn to polypeptide having SEQ ID NO: 19.
Group 20, claim(s) 1, 2, 17, 18, and 75, drawn to polypeptide having SEQ ID NO: 20.
Group 21, claim(s) 1, 2, 17, 18, and 76, drawn to polypeptide having SEQ ID NO: 21.
Group 22, claim(s) 1, 2, 17, 18, and 77, drawn to polypeptide having SEQ ID NO: 22.
Group 23, claim(s) 1, 2, 17, 18, and 78, drawn to polypeptide having SEQ ID NO: 23.
Group 24, claim(s) 1, 2, 17, 18, and 79, drawn to polypeptide having SEQ ID NO: 24.
Group 25, claim(s) 1, 2, 17, 18, and 80, drawn to polypeptide having SEQ ID NO: 25.
Group 26, claim(s) 1, 2, 17, 18, and 81, drawn to polypeptide having SEQ ID NO: 26.
Group 27, claim(s) 1, 2, 17, 18, and 82, drawn to polypeptide having SEQ ID NO: 27.
Group 28, claim(s) 1, 2, 17, 18, and 83, drawn to polypeptide having SEQ ID NO: 28.
Group 29, claim(s) 1, 2, 17, 18, and 84, drawn to polypeptide having SEQ ID NO: 29.
Group 30, claim(s) 1, 2, 17, 18, and 85, drawn to polypeptide having SEQ ID NO: 30.
Group 31, claim(s) 1, 2, 17, 18, and 86, drawn to polypeptide having SEQ ID NO: 31.
Group 32, claim(s) 1, 2, 17, 18, and 87, drawn to polypeptide having SEQ ID NO: 32.
Group 33, claim(s) 1, 2, 17, 18, and 88, drawn to polypeptide having SEQ ID NO: 33.
Group 34, claim(s) 1, 2, 17, 18, and 89, drawn to polypeptide having SEQ ID NO: 34.
Group 35, claim(s) 1, 2, 17, 18, and 90, drawn to polypeptide having SEQ ID NO: 35.
Group 36, claim(s) 1, 2, 17, 18, and 91, drawn to polypeptide having SEQ ID NO: 36.
Group 37, claim(s) 1, 2, 17, 18, and 92, drawn to polypeptide having SEQ ID NO: 37.
Group 38, claim(s) 1, 2, 17, 18, and 93, drawn to polypeptide having SEQ ID NO: 38.
Group 39, claim(s) 1, 2, 17, 18, and 94, drawn to polypeptide having SEQ ID NO: 39.

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Group 40, claim(s) 1, 2, 17, 18, and 95, drawn to polypeptide having SEQ ID NO: 40.

Group 41, claim(s) 1, 2, 17, 18, and 96, drawn to polypeptide having SEQ ID NO: 41.

Group 42, claim(s) 1, 2, 17, 18, and 97, drawn to polypeptide having SEQ ID NO: 42.

Group 43, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 98, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 1.

Group 44, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 99, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 2.

Group 45, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 100, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 3.

Group 46, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 101, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 4.

Group 47, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 102, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 5.

Group 48, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 103, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 6.

Group 49, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 104, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 7.

Group 50, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 105, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 8.

Group 51, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 106, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 9.

Group 52, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 107, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 10.

Group 53, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 108, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 11.

Group 54, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 109, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 12.

Group 55, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 110, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 13.

Group 56, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 111, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 14.

Group 57, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 112, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 15.

Group 58, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 113, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 16.

Group 59, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 114, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 17.

Group 60, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 115, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 18.

Group 61, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 116, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 19.

Group 62, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 117, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 20.

Group 63, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 118, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 21.

Group 64, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 119, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 22.

Group 65, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 120, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 23.

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Group 66, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 121, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 24.

Group 67, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 122, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 25.

Group 68, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 123, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 26.

Group 69, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 124, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 27.

Group 70, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 125, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 28.

Group 71, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 126, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 29.

Group 72, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 127, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 30.

Group 73, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 128, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 31.

Group 74, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 129, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 32.

Group 75, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 130, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 33.

Group 76, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 131, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 34.

Group 77, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 132, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 35.

Group 78, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 133, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 36.

Group 79, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 134, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 37.

Group 80, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 135, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 38.

Group 81, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 136, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 39.

Group 82, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 137, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 40.

Group 83, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 138, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 41.

Group 84, claim(s) 3-7, 9, 10, 12, 13, 46-55, and 139, drawn to polynucleotide encoding polypeptide having SEQ ID NO: 42.

Group 85, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 1.

Group 86, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 2.

Group 87, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 3.

Group 88, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 4.

Group 89, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 5.

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Group 90, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 6.

Group 91, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 7.

Group 92, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 8.

Group 93, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 9.

Group 94, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 10.

Group 95, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 11.

Group 96, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 12.

Group 97, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 13.

Group 98, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 14.

Group 99, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 15.

Group 100, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 16.

Group 101, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 17.

Group 102, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 18.

Group 103, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 19.

Group 104, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 20.

Group 105, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 21.

Group 106, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 22.

Group 107, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 23.

Group 108, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 24.

Group 109, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 25.

Group 110, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 26.

Group 111, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 27.

Group 112, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 28.

Group 113, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 29.

Group 114, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 30.

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Group 115, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 31.

Group 116, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 32.

Group 117, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 33.

Group 118, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 34.

Group 119, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 35.

Group 120, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 36.

Group 121, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 37.

Group 122, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 38.

Group 123, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 39.

Group 124, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 40.

Group 125, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 41.

Group 126, claim(s) 8, drawn to transgenic organism comprising polynucleotide encoding polypeptide having SEQ ID NO: 42.

Group 127, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 1.

Group 128, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 2.

Group 139, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 3.

Group 130, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 4.

Group 131, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 5.

Group 132, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 6.

Group 133, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 7.

Group 134, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 8.

Group 135, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 9.

Group 136, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 10.

Group 137, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 11.

Group 138, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 12.

Group 139, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 13.

Group 140, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 14.

Group 141, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 15.

Group 142, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 16.

Group 143, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 17.

Group 144, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 18.

Group 145, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 19.

Group 146, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 20.

Group 147, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 21.

Group 148, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 22.

Group 149, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 23.

Group 150, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 24.

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Group 151, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 25.
Group 152, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 26.
Group 153, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 27.
Group 154, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 28.
Group 155, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 29.
Group 156, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 30.
Group 157, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 31.
Group 158 claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 32.
Group 159, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 33.
Group 160, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 34.
Group 161, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 35.
Group 162, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 36.
Group 163, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 37.
Group 164, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 38.
Group 165, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 39.
Group 166, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 40.
Group 167, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 41.
Group 168, claim(s) 11 and 30-45, drawn to antibody against polypeptide having SEQ ID NO: 42.

Group 169, claim(s) 14-16, drawn to method for detecting polynucleotide using polynucleotide encoding polypeptide having SEQ ID NO: 1.
Group 170, claim(s) 14-16, drawn to method for detecting polynucleotide using polynucleotide encoding polypeptide having SEQ ID NO: 2.
Group 171, claim(s) 14-16, drawn to method for detecting polynucleotide using polynucleotide encoding polypeptide having SEQ ID NO: 3.
Group 172, claim(s) 14-16, drawn to method for detecting polynucleotide using polynucleotide encoding polypeptide having SEQ ID NO: 4.
Group 173, claim(s) 14-16, drawn to method for detecting polynucleotide using polynucleotide encoding polypeptide having SEQ ID NO: 5.
Group 174, claim(s) 14-16, drawn to method for detecting polynucleotide using polynucleotide encoding polypeptide having SEQ ID NO: 6.
Group 175, claim(s) 14-16, drawn to method for detecting polynucleotide using polynucleotide encoding polypeptide having SEQ ID NO: 7.
Group 176, claim(s) 14-16, drawn to method for detecting polynucleotide using polynucleotide encoding polypeptide having SEQ ID NO: 8.
Group 177, claim(s) 14-16, drawn to method for detecting polynucleotide using polynucleotide encoding polypeptide having SEQ ID NO: 9.
Group 178, claim(s) 14-16, drawn to method for detecting polynucleotide using polynucleotide encoding polypeptide having SEQ ID NO: 10.
Group 179, claim(s) 14-16, drawn to method for detecting polynucleotide using polynucleotide encoding polypeptide having SEQ ID NO: 11.
Group 180, claim(s) 14-16, drawn to method for detecting polynucleotide using polynucleotide encoding polypeptide having SEQ ID NO: 12.
Group 181, claim(s) 14-16, drawn to method for detecting polynucleotide using polynucleotide encoding polypeptide having SEQ ID NO: 13.
Group 182, claim(s) 14-16, drawn to method for detecting polynucleotide using polynucleotide encoding polypeptide having SEQ ID NO: 14.
Group 183, claim(s) 14-16, drawn to method for detecting polynucleotide using polynucleotide encoding polypeptide having SEQ ID NO: 15.

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Group 209, claim(s) 14-16, drawn to method for detecting polynucleotide using polynucleotide encoding polypeptide having SEQ ID NO: 41.

Group 210, claim(s) 14-16, drawn to method for detecting polynucleotide using polynucleotide encoding polypeptide having SEQ ID NO: 42.

Group 211, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 1.

Group 212, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 2.

Group 213, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 3.

Group 214, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 4.

Group 215, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 5.

Group 216, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 6.

Group 217, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 7.

Group 218, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 8.

Group 219, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 9.

Group 220 claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 10.

Group 221, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 11.

Group 222, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 12.

Group 223, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 13.

Group 224, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 14.

Group 225, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 15.

Group 226, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 16.

Group 227, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 17.

Group 228, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 18.

Group 229, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 19.

Group 230, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 20.

Group 231, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 21.

Group 232, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 22.

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Group 233, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 23.

Group 234, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 24.

Group 235, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 25.

Group 236, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 26.

Group 237, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 27.

Group 238, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 28.

Group 239, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 29.

Group 240, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 30.

Group 241, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 31.

Group 242, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 32.

Group 243, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 33.

Group 244, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 34.

Group 245, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 35.

Group 246, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 36.

Group 247, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 37.

Group 248, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 38.

Group 249, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 39.

Group 250, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 40.

Group 251, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 41.

Group 252, claim(s) 19, drawn to method of treatment by administering polypeptide having SEQ ID NO: 42.

Group 253, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 1.

Group 254, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 2.

Group 255, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 3.

Group 256, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 4.

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Group 257, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 5.

Group 258, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 6.

Group 259, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 7.

Group 260, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 8.

Group 261, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 9.

Group 262, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 10.

Group 263, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 11.

Group 264, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 12.

Group 265, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 13.

Group 266, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 14.

Group 267, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 15.

Group 268, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 16.

Group 269, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 17.

Group 270, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 18.

Group 271, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 19.

Group 272, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 20.

Group 273, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 21.

Group 274, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 22.

Group 275, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 23.

Group 276, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 24.

Group 277, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 25.

Group 278, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 26.

Group 279, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 27.

Group 280, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 28.

Group 281, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 29.

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Group 282, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 30.

Group 283, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 31.

Group 284, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 32.

Group 285, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 33.

Group 286, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 34.

Group 287, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 35.

Group 288, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 36.

Group 289, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 37.

Group 290, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 38.

Group 291, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 39.

Group 292, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 40.

Group 293, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 41.

Group 294, claim(s) 20, drawn to a method of screening agonists of polypeptide having SEQ ID NO: 42.

Group 295, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 1.

Group 296, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 2.

Group 297, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 3.

Group 298, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 4.

Group 299, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 5.

Group 300, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 6.

Group 301, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 7.

Group 302, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 8.

Group 303, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 9.

Group 304, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 10.

Group 305, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 11.

Group 306, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 12.

Group 307, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 13.

Group 308, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 14.

Group 309, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 15.

Group 310, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 16.

Group 311, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 17.

Group 312, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 18.

Group 313, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 19.

Group 314, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 20.

Group 315, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 21.

Group 316, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 22.

Group 317, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 23.

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Group 318, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 24.
Group 319, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 25.
Group 320, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 26.
Group 321, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 27.
Group 322, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 28.
Group 323, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 29.
Group 324, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 30.
Group 325, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 31.
Group 326, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 32.
Group 327, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 33.
Group 328, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 34.
Group 329, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 35.
Group 330, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 36.
Group 331, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 37.
Group 332, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 38.
Group 333, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 39.
Group 334, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 40.
Group 335, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 41.
Group 336, claim(s) 21, drawn to an agonist of polypeptide having SEQ ID NO: 42.

Group 337, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 1.
Group 338, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 2.
Group 339, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 3.
Group 340, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 4.
Group 341, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 5.
Group 342, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 6.
Group 343, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 7.
Group 344, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 8.
Group 345, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 9.
Group 346, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 10.
Group 347, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 11.
Group 348, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 12.
Group 349, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 13.
Group 350, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 14.
Group 351, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 15.

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Group 352, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 16.
Group 353, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 17.
Group 354, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 18.
Group 355, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 19.
Group 356, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 20.
Group 357, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 21.
Group 358, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 22.
Group 359, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 23.
Group 360, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 24.
Group 361, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 25.
Group 362, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 26.
Group 363, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 27.
Group 364, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 28.
Group 365, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 29.
Group 366, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 30.
Group 367, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 31.
Group 368, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 32.
Group 369, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 33.
Group 370, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 34.
Group 371, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 35.
Group 372, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 36.
Group 373, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 37.
Group 374, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 38.
Group 375, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 39.
Group 376, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 40.

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Group 377, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 41.

Group 378, claim(s) 22, drawn to a method of treatment by administering the agonist of polypeptide having SEQ ID NO: 42.

Group 379, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 1.

Group 380, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 2.

Group 381, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 3.

Group 382, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 4.

Group 383, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 5.

Group 384, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 6.

Group 385, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 7.

Group 386, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 8.

Group 387, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 9.

Group 388, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 10.

Group 389, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 11.

Group 390 claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 12.

Group 391, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 13.

Group 392, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 14.

Group 393, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 15.

Group 394, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 16.

Group 395, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 17.

Group 396, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 18.

Group 397, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 19.

Group 398, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 20.

Group 399, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 21.

Group 400, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 22.

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Group 401, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 23.

Group 402, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 24.

Group 403, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 25.

Group 404, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 26.

Group 405, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 27.

Group 406, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 28.

Group 407, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 29.

Group 408, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 30.

Group 409, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 31.

Group 410, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 32.

Group 411, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 33.

Group 412, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 34.

Group 413, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 35.

Group 414, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 36.

Group 415, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 37.

Group 416, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 38.

Group 417, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 39.

Group 418, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 40.

Group 419, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 41.

Group 420, claim(s) 23, drawn to a method of screening antagonists of polypeptide having SEQ ID NO: 42.

Group 421, claim(s) 24, drawn to an antagonist of polypeptide having SEQ ID NO: 1.

Group 422, claim(s) 24, drawn to an antagonist of polypeptide having SEQ ID NO: 2.

Group 423, claim(s) 24, drawn to an antagonist of polypeptide having SEQ ID NO: 3.

Group 424, claim(s) 24, drawn to an antagonist of polypeptide having SEQ ID NO: 4.

Group 425, claim(s) 24, drawn to an antagonist of polypeptide having SEQ ID NO: 5.

Group 426, claim(s) 24, drawn to an antagonist of polypeptide having SEQ ID NO: 6.

Group 427, claim(s) 24, drawn to an antagonist of polypeptide having SEQ ID NO: 7.

Group 428, claim(s) 24, drawn to an antagonist of polypeptide having SEQ ID NO: 8.

Group 429, claim(s) 24, drawn to an antagonist of polypeptide having SEQ ID NO: 9.

Group 463, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 1.

Group 464, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 2.

Group 465, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 3.

Group 466, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 4.

Group 467, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 5.

Group 468, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 6.

Group 469, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 7.

Group 470, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 8.

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Group 471, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 9.

Group 472, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 10.

Group 473, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 11.

Group 474, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 12.

Group 475, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 13.

Group 476, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 14.

Group 477, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 15.

Group 478, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 16.

Group 479, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 17.

Group 480, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 18.

Group 481, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 19.

Group 482, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 20.

Group 483, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 21.

Group 484, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 22.

Group 485, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 23.

Group 486, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 24.

Group 487, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 25.

Group 488, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 26.

Group 489, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 27.

Group 490, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 28.

Group 491, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 29.

Group 492, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 30.

Group 493, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 31.

Group 494, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 32.

Group 495, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 33.

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Group 496, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 34.

Group 497, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 35.

Group 498, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 36.

Group 499, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 37.

Group 500, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 38.

Group 501, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 39.

Group 502, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 40.

Group 503, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 41.

Group 504, claim(s) 25, drawn to a method of treatment by administering the antagonist of polypeptide having SEQ ID NO: 42.

Group 505, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 1.

Group 506, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 2.

Group 507, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 3.

Group 508, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 4.

Group 509, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 5.

Group 510, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 6.

Group 511, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 7.

Group 512, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 8.

Group 513, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 9.

Group 514, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 10.

Group 515, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 11.

Group 516, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 12.

Group 517, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 13.

Group 518, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 14.

Group 519, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 15.

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Group 520, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 16.

Group 521, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 17.

Group 522, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 18.

Group 523, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 19.

Group 524, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 20.

Group 525, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 21.

Group 526, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 22.

Group 527, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 23.

Group 528, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 24.

Group 529, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 25.

Group 530, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 26.

Group 531, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 27.

Group 532, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 28.

Group 533, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 29.

Group 534, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 30.

Group 535, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 31.

Group 536, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 32.

Group 537, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 33.

Group 538, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 34.

Group 539, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 35.

Group 540, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 36.

Group 541, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 37.

Group 542, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 38.

Group 543, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 39.

Group 544, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 40.

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Group 545, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 41.

Group 546, claim(s) 26, drawn to a method for screening compounds that bind to polypeptide having SEQ ID NO: 42.

Group 547, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 1.

Group 548, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 2.

Group 549, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 3.

Group 550, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 4.

Group 551, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 5.

Group 552, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 6.

Group 553, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 7.

Group 554, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 8.

Group 555, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 9.

Group 556, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 10.

Group 557, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 11.

Group 558, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 12.

Group 559, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 13.

Group 560, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 14.

Group 561, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 15.

Group 562, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 16.

Group 563, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 17.

Group 564, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 18.

Group 565, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 19.

Group 566, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 20.

Group 567, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 21.

Group 568, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 22.

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Group 569, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 23.

Group 570, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 24.

Group 571, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 25.

Group 572, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 26.

Group 573, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 27.

Group 574, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 28.

Group 575, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 29.

Group 576, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 30.

Group 577, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 31.

Group 578, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 32.

Group 579, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 33.

Group 580, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 34.

Group 581, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 35.

Group 582, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 36.

Group 583, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 37.

Group 584, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 38.

Group 585, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 39.

Group 586, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 40.

Group 587, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 41.

Group 588, claim(s) 27, drawn to a method for screening compounds that modulate the activity of polypeptide having SEQ ID NO: 42.

Group 589, claim(s) 28, drawn to a method of screening for compounds that alter the expression of polynucleotide encoding polypeptide having SEQ ID NO: 1.

Group 590, claim(s) 28, drawn to a method of screening for compounds that alter the expression of polynucleotide encoding polypeptide having SEQ ID NO: 2.

Group 591, claim(s) 28, drawn to a method of screening for compounds that alter the expression of polynucleotide encoding polypeptide having SEQ ID NO: 3.

Group 592, claim(s) 28, drawn to a method of screening for compounds that alter the expression of polynucleotide encoding polypeptide having SEQ ID NO: 4.

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Group 618, claim(s) 28, drawn to a method of screening for compounds that alter the expression of polynucleotide encoding polypeptide having SEQ ID NO: 30.

Group 619, claim(s) 28, drawn to a method of screening for compounds that alter the expression of polynucleotide encoding polypeptide having SEQ ID NO: 31.

Group 620, claim(s) 28, drawn to a method of screening for compounds that alter the expression of polynucleotide encoding polypeptide having SEQ ID NO: 32.

Group 621, claim(s) 28, drawn to a method of screening for compounds that alter the expression of polynucleotide encoding polypeptide having SEQ ID NO: 33.

Group 622, claim(s) 28, drawn to a method of screening for compounds that alter the expression of polynucleotide encoding polypeptide having SEQ ID NO: 34.

Group 623, claim(s) 28, drawn to a method of screening for compounds that alter the expression of polynucleotide encoding polypeptide having SEQ ID NO: 35.

Group 624, claim(s) 28, drawn to a method of screening for compounds that alter the expression of polynucleotide encoding polypeptide having SEQ ID NO: 36.

Group 625, claim(s) 28, drawn to a method of screening for compounds that alter the expression of polynucleotide encoding polypeptide having SEQ ID NO: 37.

Group 626, claim(s) 28, drawn to a method of screening for compounds that alter the expression of polynucleotide encoding polypeptide having SEQ ID NO: 38.

Group 627, claim(s) 28, drawn to a method of screening for compounds that alter the expression of polynucleotide encoding polypeptide having SEQ ID NO: 39.

Group 628, claim(s) 28, drawn to a method of screening for compounds that alter the expression of polynucleotide encoding polypeptide having SEQ ID NO: 40.

Group 629, claim(s) 28, drawn to a method of screening for compounds that alter the expression of polynucleotide encoding polypeptide having SEQ ID NO: 41.

Group 630, claim(s) 28, drawn to a method of screening for compounds that alter the expression of polynucleotide encoding polypeptide having SEQ ID NO: 42.

Group 631, claim(s) 29, drawn to a method for assessing toxicity using a polynucleotide encoding polypeptide having SEQ ID NO: 1.

Group 632, claim(s) 29, drawn to a method for assessing toxicity using a polynucleotide encoding polypeptide having SEQ ID NO: 2.

Group 633, claim(s) 29, drawn to a method for assessing toxicity using a polynucleotide encoding polypeptide having SEQ ID NO: 3.

Group 634, claim(s) 29, drawn to a method for assessing toxicity using a polynucleotide encoding polypeptide having SEQ ID NO: 4.

Group 635, claim(s) 29, drawn to a method for assessing toxicity using a polynucleotide encoding polypeptide having SEQ ID NO: 5.

Group 636, claim(s) 29, drawn to a method for assessing toxicity using a polynucleotide encoding polypeptide having SEQ ID NO: 6.

Group 637, claim(s) 29, drawn to a method for assessing toxicity using a polynucleotide encoding polypeptide having SEQ ID NO: 7.

Group 638, claim(s) 29, drawn to a method for assessing toxicity using a polynucleotide encoding polypeptide having SEQ ID NO: 8.

Group 639, claim(s) 29, drawn to a method for assessing toxicity using a polynucleotide encoding polypeptide having SEQ ID NO: 9.

Group 640, claim(s) 29, drawn to a method for assessing toxicity using a polynucleotide encoding polypeptide having SEQ ID NO: 10.

Group 641, claim(s) 29, drawn to a method for assessing toxicity using a polynucleotide encoding polypeptide having SEQ ID NO: 11.

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Group 667, claim(s) 29, drawn to a method for assessing toxicity using a polynucleotide encoding polypeptide having SEQ ID NO: 37.

Group 668, claim(s) 29, drawn to a method for assessing toxicity using a polynucleotide encoding polypeptide having SEQ ID NO: 38.

Group 669, claim(s) 29, drawn to a method for assessing toxicity using a polynucleotide encoding polypeptide having SEQ ID NO: 39.

Group 670, claim(s) 29, drawn to a method for assessing toxicity using a polynucleotide encoding polypeptide having SEQ ID NO: 40.

Group 671, claim(s) 29, drawn to a method for assessing toxicity using a polynucleotide encoding polypeptide having SEQ ID NO: 41.

Group 672, claim(s) 29, drawn to a method for assessing toxicity using a polynucleotide encoding polypeptide having SEQ ID NO: 42.

The inventions listed as Groups 1-672 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The polypeptides and corresponding nucleic acids differ in structure and in function and therefore lack a special technical feature.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the

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application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. **Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier.** Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai*, *In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.**

Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen Cochrane Carlson, Ph.D. whose telephone number is 571-272-0946.

The examiner can normally be reached on 7:00 AM - 4:00 PM, off alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Kathleen Kerr Bragdon can be reached on 571-272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in cursive script that reads "Karen Cochrane Carlson PhD".

KAREN COCHRANE CARLSON, PH.D
PRIMARY EXAMINER